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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/768,131 | 01/23/2001 | Yong Cheol Park | 2080-3-01 | 3339 |

35884 7590 05/03/2005

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EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT

PAPER NUMBER

2655

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,131

Applicant(s)

PARK, YONG CHEOL

Examiner

Jorge L. Ortiz-Criado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/06/2005 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 7-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Claims 7, 9 and 12, recite the limitations “first mode; the first mode for replacing the defective segment during the formation process”, “reserving an area” and “reserved areas”; “the reserved area being a part of the user area”.

And, Claims 14 and 15 recite the limitations “reserving and area” and “reserved areas”; “wherein the area is part of the user area”.

The Examiner cannot readily ascertain/map with the above claim language where in the specification as originally filed such a disclosure/support is found in the descriptive portion of the specification by reference to the drawings, designating the part or parts therein to which the term applies.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9 and 11-16 are rejected under 35 U.S.C. 102(e) as being anticipated by

Takahashi U.S. Patent No. 6,373,800.

Regarding claim 1, Takahashi discloses a method of formatting a recording medium having a recording capacity, comprising the steps of:

- receiving a command for formatting the recording medium;
- registering defective areas in primary defect lists (PDL) and performing a slipping replacement corresponding to a number of PDL entries (See col. 13, lines 25-36),
- determining whether a slipping replacement error occurred in response to the number of PDL entries (see col. 13, lines 38-58):
- checking a number of un-slipped PDL entries if a slipping replacement error occurred (see col. 13, lines 38-58) ; and
- adjusting the recording capacity of the recording medium based on the number of un-slipped PDL entries (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 2, Takahashi discloses wherein the recording capacity adjusting step comprises excluding a capacity corresponding to the number of un-slipped PDL entries (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 3, Takahashi discloses wherein a recording capacity information written in a specified area of the recording medium is updated to indicate the adjusted capacity, wherein the recording capacity information indicates total logical sector numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Regarding claim 4, Takahashi discloses a method of formatting a recording medium having a predetermined recording capacity including a spare area for replacing defect areas, the method comprising the steps of:

registering defective area information in a defect area management list if a command for formatting the recording medium is received (See col. 13, lines 25-36),

replacing the defective areas with corresponding spare areas in response to the number of registered defective areas in the defect area management list during the formatting (see col. 13, lines 38-58);

confirming whether or not an error has occurred due to lack of the spare area in comparison to the defective areas (see col. 13, lines 38-58), and

adjusting the recording capacity of the recording medium based on the number of unreplaced defective areas if it is confirmed that an error occurred (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 5, Takahashi discloses wherein the recording capacity adjusting step comprises excluding a capacity corresponding to the number of unreplaced defective areas (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 6, Takahashi discloses wherein the recording capacity information written in a specified area of the recording medium is updated to indicate the adjusted capacity, wherein the recording capacity information indicates total logical sectors numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Regarding claim 7, Takahashi discloses a method of formatting a recording medium having a predetermined recording capacity including a spare area, comprising the steps of:

registering defective segment addresses corresponding to defective segments in a first defect list in the recording medium if a command for formatting the recording medium is received (See col. 13, lines 25-36),

performing a first mode for defect replacement in response to the defective segment addresses registered in the first defect list during the formatting, the first mode for replacing the defective segment during formatting process(see col. 13, lines 38-58);

determining if an error occurred during the a first mode, wherein the error is caused when a size of the defective segments exceeds the spare area (see col. 13, lines 38-58);

stopping the first defect replacement if an error occurred and checking un-slipped segments by determining a number of the defective segments not subjected to the first defect replacement due to insufficient spare area (see col. 13, lines 38-58); and

reserving an area corresponding to the number of un-slipped segments, thereby managing the un-slipped segments continuously, wherein the area is part of a user area (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10)

Regarding claim 8, Takahashi discloses wherein the first defect list is a primary defect list (PDL) (see col. 13, lines 38-58)

Regarding claim 9, Takahashi discloses wherein the first mode for defect replacement is a slipping replacement to be performed during the formatting process (see col. 13, lines 38-58)

Regarding claim 11, Takahashi discloses wherein each defective segment comprises a defective sector (see col. 13, lines 38-58).

Regarding claim 12, Takahashi discloses updating a recording capacity information to indicate the reserved areas, the reserved area being a part of the user area (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10)

Regarding claim 13, Takahashi discloses wherein the recording capacity information is total logical sector numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Regarding claim 14, Takahashi discloses a method of formatting a recording medium having a recording capacity, comprising the steps of:

receiving a command for formatting the recording medium (see col. 13, lines 38-58),
performing a slipping replacement corresponding to a number of PDL entries if the command is received (see col. 13, lines 38-58),

determining whether a slipping replacement error is occurred in response to the number of PDL entries (see col. 13, lines 38-58),

checking a number of un-slipped PDL entries if the slipping replacement error is occurred (see col. 13, lines 38-58) and

reserving an area corresponding to the number of un-slipped PDL entries to replace the un-slipped PDL entries, wherein the area is a part of a user area (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 15, Takahashi discloses updating a recording capacity information at least to exclude the reserved areas (see col. 13, line 58 to col. 14, line 2; col. 14, line 66 to col. 15 line 10).

Regarding claim 16, Takahashi discloses wherein the recording capacity information is total logical sector numbers (See col. 7, lines 49-62; col. 13, line 58 to col. 14, line 10).

Response to Arguments

5. Applicant's arguments filed 04/06/2005 have been fully considered but they are not persuasive.

In regard to claim 1,4,7 and 14 applicant argues that Takahashi does not teach or suggest the claimed elements of “adjusting the recording capacity of the recording medium based on the number of un-slipped PDL entries”, “adjusting the recording medium based on the number of un-replaced defective areas if is confirmed that an error occurred”, “reserving an area corresponding to the number of un-slipped segments, thereby managing the un-slipped segments continuously, wherein the area is part of a user area, “reserving an area corresponding to the

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number of un-slipped PDL entries to replace the un-slipped PDL entries, wherein the area is part of a user area, respectively and further does not control un-slipped defective areas during the formatting.

The examiner cannot concur with the applicant because Takahashi clearly discloses that a command for **formatting** is received, and further adjusting the recording capacity of the recording medium based on the number of un-slipped PDL entries, when confirmed that an error has occurred in the slipping replacement process due to insufficient spare areas, adding/reserving/assigning etc. new spare areas (see description col. 13, line 19 to col. 14, line 2).

Furthermore, Takahashi clearly discloses that **the areas are part of the user area** (see col. 14, lines 11-22)

Conclusion

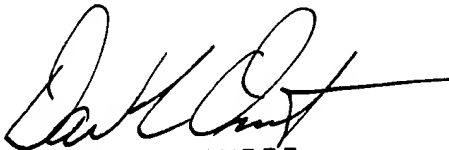
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L. Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm), Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H. To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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